APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,984	02/15/2007	Johan Eker	P18656-US2	1283

27045   7590   02/04/2011

ERICSSON INC.
6300 LEGACY DRIVE
M/S EVR 1-C-11
PLANO, TX 75024

EXAMINER
WITZENBURG, BRUCE A

ART UNIT	PAPER NUMBER
2166	

NOTIFICATION DATE	DELIVERY MODE
02/04/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

kara.coffman@ericsson.com
jennifer.hardin@ericsson.com
melissa.rhea@ericsson.com

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
	10/595,984	EKER ET AL.
Office Action Summary	Examiner	Art Unit	
	BRUCE A. WITZENBURG	2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>05 November 2010</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>22-42</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>22-42</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>23 May 2006</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☒ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>12/13/2010</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1.   With respect to amendments filed 11/05/2010, claims 22-42 remain pending in

the instant application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims are rejected under 35 U.S.C. 103(a) as being unpatentable over Levi et

al. (US 6,804,778), hereafter "Levi" in view of Gary et al. (US 5,699,509), hereafter

"Gary"

Regarding claim 22. Levi discloses a method of differentially updating an image of

stored data in a computing system from a first data version to an updated data version,

the method comprising the steps of:

detecting whether the image of stored data in a data store of the computing system

includes one or more corrupted memory blocks having stored therein data that is

inconsistent with the first data version; (Abs; Fig 1; Fig 2B - Fig 5; Col 2, lines 38-59; Col

3, lines 20-55; Col 4, lines 24-61; Col 5, lines 1-11; Col 6, lines 40-64;

receiving dedicated differential update instructions, wherein

the dedicated differential update instructions comprise differential update instructions

used to generate the updated data version and differential update instructions used to

repair the data that is inconsistent with the first data version, (Col 2, lines 38-59; Col 3,

lines 43-55; Col 4, lines 24-61; Col 12, lines 47-63 Note that the resubmission of corrupt

blocks constitutes a "differential update" as the corrected blocks constitute the

differences between the versions. Further, because no verbiage is used which

differentiates the result of the differential update on the first version and a non-corrupt

first version, the detection of corrupt version and the correction to the non-corrupt

version reads upon this limitation) and

the dedicated differential update instructions are generated in response to detecting the

image of stored data in the data store of the computing system includes one or more

corrupted memory blocks having stored therein data that is inconsistent with the first

data version; (as above) and

loading the dedicated differential update instructions into the data store of the

computing device; (Col 2, lines 38-59; Col 3, lines 43-55; Col 4, lines 24-61; Col 12,

lines 47-63, Note they must be loaded to run)

repairing, when generating the updated data version, any such detected corrupted

memory block;

wherein the image of stored data in the data store is updated in-place such that data of

the first data version is reused and reorganized to generate the updated data version.

(Col 2, lines 38-59; Col 3, lines 43-55; Col 4, lines 24-61; Col 12, lines 47-63 Note only

corrupted blocks are replaced and the remaining data is untouched and remains in-

place.

Note that the implementation of Levi is directed towards a web server and not

specifically to a mobile terminal having flash memory.

Gary is directed towards error detection within a personal computing system. (Abs)

Because personal computing systems at the time of the invention encompass laptops

and personal digital assistants, it would have been obvious to enable error detection in

a mobile device with flash detection. Further, it would have been obvious to one of

ordinary skill in the art at the time of the invention to use the error detection of Gary in

the same way as Levi and produce a differential update to correct corrupted data blocks

Regarding claim 23, claim 23 is rejected for substantially the same reason as claim 22

above.

Regarding claim 24, claim 24 is rejected for substantially the same reason as claim 22 above.

Regarding claim 25, claim 25 is rejected for substantially the same reason as claim 22 above. Note the update is specifically to repair corrupt data blocks.

Regarding claim 26, claim 26 is rejected for substantially the same reason as claim 22 above. Note the corrected information is transmitted from the secure source and the "transparent unit" detects and generates the updates. The "transparent unit" may be a local software module or a separate piece of hardware according to Levi (Col 14, lines 60-67)

Regarding claim 27, claim 27 is rejected for substantially the same reason as claim 22 above. Note the corrected information is transmitted from the secure source and the "transparent unit" detects and generates the updates. The "transparent unit" may be a local software module or a separate piece of hardware according to Levi (Col 14, lines 60-67)

Regarding claim 28, while Levi does not specifically disclose transmission over a wireless communication link, WiFi and cellular communication standards are well known in the art at the time of the invention and it would have been both obvious and trivial for one of ordinary skill in the art at the time of the invention to communicate uninhibited

through a known wireless standard such as 3g or 802.11 a/b or g.

Regarding claim 29, claim 29 is rejected for substantially the same reason as claim 22

above. Note Levi specifically discusses IP port addressing and web communications.

Regarding claim 30, claim 30 is rejected for substantially the same reason as claim 22

above. Note detection occurs on the "transparent unit" which may be a local software

module or a separate piece of hardware within the implementation of Levi and on-

device within Gary. Further Levi makes requests of uncorrupted data from a secure

source which may be remote in certain implementations. With this in mind it is at least

obvious to one of ordinary skill in the art at the time of the invention to detect corrupt

memory blocks locally and send information about them to a remote source for retrieval

of uncorrupted data.

Regarding claim 31, claim 31 is rejected for substantially the same reason as claim 30

above. Note in implementations where the "transparent device" is remote, information

about the image of the data is sent to this remote data processing system which then

detects errors.

Regarding claim 32, Levi as modified discloses the step of detecting further comprising

calculating a number of checksums by the processor of the mobile terminal, wherein

each checksum corresponds to a corresponding memory block of data stored in the

flash memory of the mobile terminal; and

comparing the calculated checksums with a number of reference checksums to identify

any corrupted memory block of data. (Col 7, lines 11-32; Col 10, line 42 – Col 11, line

14)

Regarding claim 33, Levi as modified discloses the reference checksums being stored

in the flash memory of the mobile terminal and further comprising the step of performing

the step of comparing by the mobile terminal. (Col 7, lines 45-52)

Regarding claim 34, Levi as modified discloses the step of integrity protecting the

reference checksums stored in the mobile terminal by a message authentication code.

Col 5, lines 1-11; Col 7, lines 11-65)

Regarding claim 35. Levi discloses storing the reference checksums on a remote data

processing system wherein the transmitted information comprises the calculated

checksums; (Col 7, lines 33-44) and

wherein the detecting step further comprises the step of comparing the transmitted

calculated checksums by the remote data processing system with the number of

reference checksums stored on the remote data processing system. (Col 5, lines 1-11;

Col 7, lines 11-65 Note this occurs when the transparent unit is remote)

36. (Previously Presented) The method according to claim 32, wherein the calculating step further comprises the step of calculating the checksums as a cryptographically strong one-way hash function of the corresponding memory block of the image of the stored data. (Col 7, lines 11-32)

Regarding claim 37, claim 37 is rejected for substantially the same reason as claim 22 above.

Regarding claim 38, claim 38 is rejected for substantially the same reason as claim 22 above.

Regarding claim 39, claim 39 is rejected for substantially the same reason as claim 22 above.

Regarding claim 40, claim 40 is rejected for substantially the same reason as claim 22 above.

Regarding claim 41, claim 41 is rejected for substantially the same reason as claim 28 above.

Regarding claim 42, claim 42 is rejected for substantially the same reason as claim 26 above.

Response to Arguments

3.   With respect to applicant's arguments filed 11/05/2010, the arguments have been

deemed moot in light of the new grounds of rejection presented above which was

necessitated by amendment.

The examiner would also like to note that because there is no differentiating language

separating the updated data version and what is effectively the repaired first version, the

examine does not believe the amendments presented fully overcome the cited prior art.

However, the currently cited art better applies to the claims as amended and will be

presented in the place of the previously cited art in order to help expedite prosecution.

Conclusion

4.   The prior art made of reference within this action is as follows:

      a.   Levi et al. (US 6,804,778)

      b.   Gary et al. (US 5,699,509)

5.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to BRUCE A. WITZENBURG whose telephone number is

(571)270-1908. The examiner can normally be reached on M-F 9:00 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bruce A Witzenburg/
Examiner, Art Unit 2166

/Etienne P LeRoux/
Primary Examiner, Art Unit 2161